

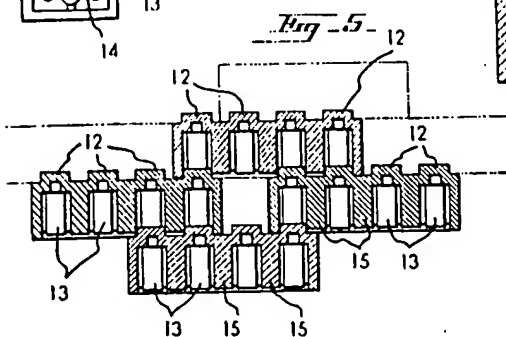
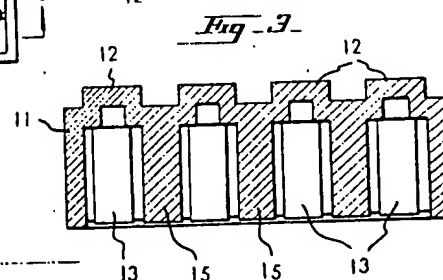
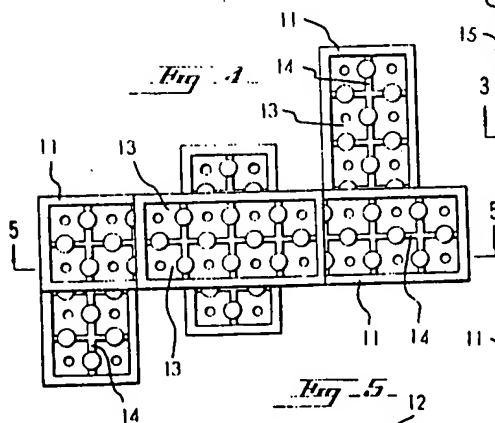
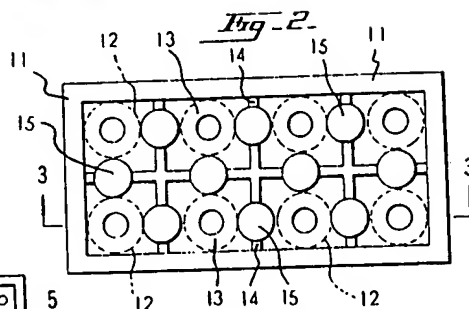
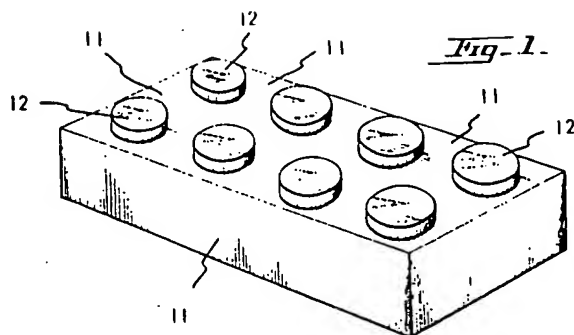
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COMPLETE SPECIFICATION

1 SHEET

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Kushi



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1,194,445



## PATENT SPECIFICATION

DRAWINGS ATTACHED

1,194,445

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Complete Specification Published: 10 June, 1970.

Index at acceptance:—A6 S6C1B

International Classification:—A 63 h 33/08

COMPLETE SPECIFICATION

A Toy Building Element

GREAT BRITAIN  
GROUP.....  
CLASS.....  
RECORDED

I, YOSHIHIRO KISHI, a Japanese citizen, of 2—7, Kuramae 11-chome, Daito-ku, Tokyo, Japan, do hereby declare the invention, for which we pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to a toy building element.

According to the invention, there is provided a toy building element integrally moulded from a synthetic resin and comprising a hollow block having a pair of opposed side walls, a pair of opposed end walls, an upper wall, and a plurality of projections extending from the outer surface of the said upper wall, the interior of the block being divided by a lattice into a number of cells corresponding in number to the number of said projections, and part-cylindrical projections extending from said lattice into said cells, the arrangement being such that when two like elements are superposed the projections of one element are received and frictionally retained within a respective cell of the second element.

The terms "upper" and "lower" are used herein merely to indicate the relative positions of various parts of the element when the element is in a particular orientation. It is not, however, intended that the scope of the invention is to be restricted to the element when in that orientation.

An embodiment of the invention will now be described, by way of example, with reference to the accompanying drawing, in which:

Fig. 1 is a perspective view of the entirety of a toy building element according to the present invention;

Fig. 2 is an underneath plan of the toy block shown in Fig. 1;

Fig. 3 is a section taken on line 3—3 of Fig. 2;

Fig. 4 is an underneath plan illustrating an arrangement of several building elements as-

sembled together, and

Fig. 5 is a section taken on line 5—5 of Fig. 4.

As shown in the drawings, the toy building element comprises a hollow block 11 having a pair of opposed side walls, a pair of opposed end walls and an upper wall. Extending from the outer surface of the upper wall of the block 11 is a plurality of cylindrical projections 12, adjacent projections 12 being equally spaced. As shown, the projections 12 are arranged in two rows, four projections in each row, but the number of such projections can be varied as desired. Also, the projections 12 can have a configuration other than cylindrical. The parts of the element are moulded integrally from a synthetic resin.

The interior of the block 11 is partitioned by ribs 14 in the form of a lattice which defines cells 13 in which the projections 12 of another like block can be received. In particular, the cells 13 are arranged such that the projections 12 of one block are received within a respective cell 13 of the other block when the two blocks are superposed (see Fig. 2).

The width of each rib 14 is slightly less than the thickness of the walls of the block 11. Also, each of the ribs 14 defining the cells 13 has integrally formed therewith a cylindrical lobe 15, a part-cylindrical portion of each lobe 15 extending into a respective cell. The lobes 15 extend downwardly from the inner face of the top wall of the block 11, the end of each lobe extending beyond the ribs 14 to lie in a plane parallel to a plane containing the bottom edges of the side and end walls of the block.

The block is constructed so that two or more like blocks can be joined together, by insertion of the projections 12 on one block within the respective cells 13 of another block, the projections 12 being retained therein by frictional engagement with the inner surfaces of the side and/or end walls and the lobes 15. Since the

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lobes 15 extend beyond the ribs 14, the lower end portion of each lobe 15 is elastic which eases the insertion of the projections 12 into the cells 13 and facilitates firm retention of the projections 12 therein. Thus, the possibility of accidental disjoining of a group of assembled blocks is reduced. Also, since each projection 12 is frictionally held at four points (as shown in Fig. 2), it is securely gripped and the projections 12 can be shorter than the projections of previously proposed blocks. The reduced length of the projections 12 also provides improved appearance for the block and leads to ease of disassembly of jointed blocks by lightly pulling the blocks in opposite directions.

The elements as described are durable and are relatively rigid since the interior of each block is partitioned by a lattice work.

The elements as described can be used to construct for example a building, bridge or tower.

When the elements have been assembled into a desired structure they can be disassembled and used repeatedly for assembling other structures.

#### WHAT I CLAIM IS:—

1. A toy building element integrally moulded from a synthetic resin and comprising a

hollow block having a pair of opposed side walls, a pair of opposed end walls, an upper wall, and a plurality of projections extending from the outer surface of the said upper wall, the interior of the block being divided by a lattice into a number of cells corresponding in number to the number of said projections, and part-cylindrical projections extending from said lattice into said cells, the arrangement being such that when two like elements are superposed the projections of one element are received and frictionally retained within a respective cell of the second element.

2. An element as claimed in claim 1, wherein each said part-cylindrical projection extends downwardly from the inner surface of said upper wall, and wherein the lower edge of each said part-cylindrical projection extends below the lower edge of said lattice.

3. A toy building element substantially as hereinbefore described with reference to the accompanying drawing.

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